

Service Gateway PI-5

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EGI support for WCS

Feature:

- Ensure users of programmatic access can access services using WCS parameters
- Objective:
 - Perform a trade study to define a server side UI/UX driven architecture that enables users to retrieve processed data
- Implementation:
 - Developing WCS 2.0 technology in EGI



Trade Study Progress

- Research into previous studies
 - Table with feature comparison
- Table of processing options
- 2.0 GetCapabilities working in EGI
- Testing with QGIS WCS 2.0 plugin.



WCS 1.1 support for ArcGIS

Feature:

 Ensure users of programmatic access can access services using WCS parameters

Objective:

 Develop support for WCS 1.1 requests from ArcGIS clients for MOD10A1 as a proof of concept, in the EDF accessible from NSIDC and remote developers

Implementation:

 Integrated OGC JAXB classes into EGI in order to support the WCS 1.1 protocols.



Progress towards WCS 1.1 ArcGIS support

- Successfully opened up firewall in the EDF for a windows machine running ArcGIS client to connect with EGI.
- Procuring and shipping windows with ArcGIS to William Valencia for increased efficiency of develop/test iterations.
- Integrated OGC JAXB classes into EGI from WCS 1.1 with successful integration with QGIS.
- Setting up meeting with ESRI to address inconsistencies / incompatibilities with ArcGIS and OGC JAXB implementation of WCS to help resolve remaining issues with EGI support of ArcGIS WCS requests.



Subscriptions for Services (S4S)

Feature:

 Update SDPS to enable data services for subscriptions prior to delivery

Objective:

- Develop prototype to enable subscriptions for services (S4S)
- Implementation:
 - Implementing full featured S4S solution



S4S Milestones

- Held review of capabilities necessary for phase 1 with significant input from NISDC
- Met with EDSC group to determine if this feature could fit into the EDSC workflow
- Put together wiki for a design review
- Implemented server using cloud technology
- Implemented new screen in DA GUI for management of subscriptions
- Implementing EDSC feature to allow users to turn request for data into subscriptions for future data



View Subscriptions in the DA GUI

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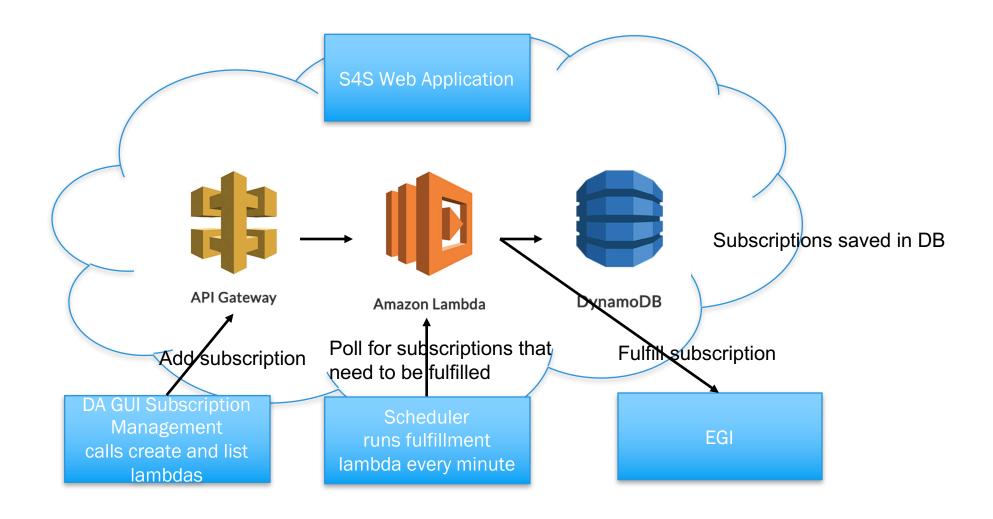
View Subscriptions

Adding Subscriptions

Delivery Options												
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Request Options												
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High Level Architecture





Cloud deployable on-prem app











serverless-offline

(Serverless plugin)

Allows invocation of lambda with embedded API Gateway

DynamoDB Local

(Java Application)

Saves user subscriptions for viewing and fulfillment

serverless-offline scheduler (Serverless plugin)

Polls DynamoDB for subscriptions and calls EGI for end user

